

### REMARKS

In response to the Office Action mailed October 30, 2002, Applicants amended claims 1, 16 and 21. Claims 1-10, 14-16 and 18-24 are presented for examination.

The Examiner rejected claims 1-10, 14-16 and 18-24 under 35 U.S.C. §102(b) as being anticipated by Breault.

As amended, claims 1-10, 14-16 and 18-24 cover compositions that compose fuel cell electrodes that are substantially free of carbon fibers.

In contrast, Breault discloses carbon paper fuel cell electrodes. (Breault col. 1, lines 41-47). Breault's electrodes are formed of a hydrophobic polymer-impregnated carbon paper substrate having a catalyst-polymer layer coating. (Id. col. 2, line 35-col. 3, line 9). Nowhere does Breault disclose or even suggest that his electrode can be "substantially free of carbon fibers." Indeed, to modify Breault's electrode to be "substantially free of carbon fibers" would fly in the face of Breault's sole object -- to provide "an improved electrochemical cell carbon-type electrode." (Id. lines 41-42). Accordingly, Breault does not disclose, or even suggest, the electrodes covered by claims 1-10, 14-16 and 18-24.

In view of the foregoing, Applicants request reconsideration and withdrawal of the rejection under 35 U.S.C. §102(b).

To the extent that the Examiner may wish to reject the amended claims under 35 U.S.C. §112, first paragraph for failure to meet the written description requirement, Applicants note that the United States Patent and Trademark Office Board of Patent Appeals and Interferences ("the Board") has held that a negative limitation that is not explicitly disclosed in a patent application as filed can be added to a claim during prosecution without violating 35 U.S.C. §112, first paragraph. Ex parte Parks, 30 U.S.P.Q.2d 1234 (B.P.A.I. 1994).

In Parks, the claims were directed to a method for determining the total chemically combined nitrogen content of a sample in which chemically bound nitrogen was converted to nitric oxide. Id. During prosecution, Applicant amended the claims to require that the conversion of chemically bound nitrogen to nitric oxide occur "in the absence of a catalyst." Id. However, the application as filed did not explicitly disclose that the conversion of chemically

bound nitrogen to nitric oxide occurred "in the absence of a catalyst," and the Examiner rejected the amended claims under 35 U.S.C. §112, first paragraph. Id. The Board overturned this rejection, commenting:

[I]t cannot be said that the originally-filed disclosure would not have conveyed to one having ordinary skill in the art that [Applicant] had possession of the *concept* of conducting the decomposition step ... in the absence of a catalyst ... Pyrolysis temperatures of between 600°C and 700°C, and above 700°C were employed to achieve conversion of chemically bound nitrogen to nitric oxide. Smooth conversion was obtained above 700°C, while the optimum conversion was found to occur above 900°C. Throughout the discussion which would seem to cry out for a catalyst if one were used, no mention is made of a catalyst. (Id. at 1236-37, emphasis in original).

The facts in Parks are substantially the same as those presented in the present application. Like in Parks, Applicants have added a claim limitation ("substantially free of carbon fibers") that is not explicitly disclosed in the application as filed. Also like in Parks, the disclosure of the application as originally filed clearly conveys to one skilled in the art that, at the time the application was filed, Applicants had possession of the claimed subject matter. For example, the application as filed provides a discussion of the various components contained within Applicants' electrodes, and there is no indication that the electrodes contain carbon fibers. (See, e.g., Application at 7-9). Thus, similar to the situation in Parks, to one skilled in the art, the application would "seem to cry out" for a discussion of carbon fibers in the electrodes if the electrodes were not substantially free of carbon fibers, but no mention is made of the use of carbon fibers in the electrodes. Accordingly, it would be improper to reject claims 1-10, 14-16 and 18-24 for failure to satisfy the written description requirement of 35 U.S.C. §112, first paragraph.

Attached is a marked-up version of the changes being made by the current amendment.

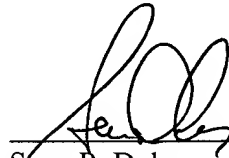
Applicant : Prathap Haridoss et al.  
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Applicants believe the application is in condition for allowance, which action is requested. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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**Version with markings to show changes made**

In the claims:

The claims were amended as follows.

--1. (Twice Amended) A composition, comprising:  
a catalyst;  
a first material resistant to oxidation up to about 3.0 Volts vs. SHE; and  
a non-electrolytic material different than the catalyst,  
wherein the catalyst is distributed on the first material with a load between about  
5 percent and about 95 percent, and the composition composes a fuel cell electrode that is  
substantially free of carbon fibers.

16. (Twice Amended) A composition, comprising:  
a catalyst; and  
a first material resistant to oxidation up to about 3.0 Volts vs. SHE,  
wherein the catalyst is distributed on the first material, and the composition  
composes a fuel cell electrode that is substantially free of carbon fibers.

21. (Twice Amended) A composition, comprising:  
a catalyst capable of catalyzing oxidation of a fuel cell gas;  
a first material resistant to oxidation up to about 3.0 Volts vs. SHE; and  
a binder comprising a fluorine-containing non- electrolytic material, the binder  
containing the first material and the catalyst,  
wherein the catalyst is distributed on the first material, and the composition  
composes a fuel cell electrode that is substantially free of carbon fibers.--